

## Resource Tracking Software



- *Dramatic Engineering Savings*
- *Lower Cost of Ownership*
- *Agility to Respond and Grow*
- *Uncompromising Openness*



Visualize



Analyze



Optimize

### PRODUCT HIGHLIGHTS

- Material Traceability (Genealogy)
- Work in Process (WIP) Tracking
- Serialization
- ModelMaker - Define and Manage Production Models
- Transaction Engine Based on Microsoft® Technology
- ActiveX® Controls
- Integrated to FactorySuite A2™ and ArchestrA® components
- Driven by Real-Time Shop Floor Events

### PRODUCT POSITION

Achieving success in today's business environment requires detailed knowledge of not only what products were manufactured, but how they were manufactured. Manufacturers are forced to be agile. Customer needs and requirements force flexibility where there once was none. Essential components of typical manufacturing operations must be under constant scrutiny to provide the necessary flexibility and agility. Customers need up-to-date information about their orders, which requires more detailed information about material locations, status and overall processing.

In many industries, government regulations force manufacturers to track production information at a more detailed level. Even when government regulations are not a factor, the

benefits of having this type of valuable information available in real-time can provide companies the competitive edge needed to be leaders in their market spaces.

The ability to instantly analyze the genealogy and process parameters of any product allows manufacturers to quickly and easily identify and resolve production problems. The real-time nature of this information also allows them to proactively address production issues, saving valuable time and materials

by correcting problems before they result in scrap or rework. Production history can give any manufacturer a competitive advantage by answering the following essential questions.

- Who was involved during order processing and materials handling?
- What were the employees' capabilities and/or skill levels?
- When were the operations performed and how long did the order take to execute?
- What machines were used at specific steps in the process?
- Where materials were processed?
- What key quality data was generated during the process?

In the event a product quality issue arises, the above information can help plant employees assess the true scope of the quality defect. For example, the ability to

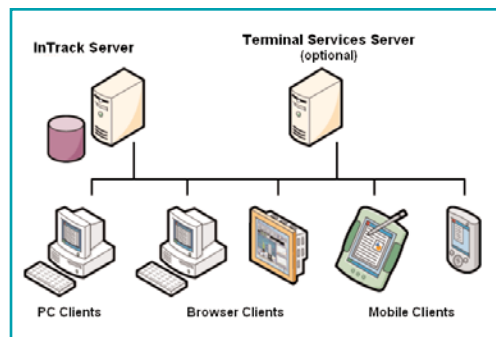
Invensys.  
**Wonderware**®

Powering intelligent plant decisions in real time.

identify precisely which products were affected - and, more importantly, which ones were not affected - can eliminate unnecessary product recalls and thus save the company significant funds and embarrassment. Additionally, this information can empower plant personnel to quickly detect the problem's root cause, and promptly address it. Even when product quality is not an issue, this type of production information can be used to analyze and understand trends in the manufacturing process, making it easier for plant employees to see these trends and proactively improve plant performance.

InTrack 7.11 resource tracking software from Wonderware, a business unit of Invensys Systems, Inc., provides valuable information that enables customers to extract the greatest value from their Enterprise Resource Planning (ERP) and Supply Chain Management (SCM) systems. InTrack software works with these transaction-based business systems to provide real-time event data and information keeping the internal and external value chain informed of the activities and needs of the factory floor. Real-time visibility and production reporting are essential to give high-velocity manufacturers the highest degree of flexibility and customization. InTrack software can also serve as a fundamental component of Collaborative Production Management (CPM) systems.

All of this functionality is integrated with Wonderware's legendary ease of use. Applications built with InTrack resource tracking software can increase a plant's operational effectiveness and help manufacturers identify and track Key Performance Indicators (KPIs). Through its graphical modeling environment and ActiveX® visualization controls, InTrack software can be deployed in a wide variety of manufacturing environments to monitor and manage the production process.



Wonderware offers customers the comforts of reliability, an array of exceptionally integrated industrial products and strong alliances with strategic vendors.

Since 1987, Wonderware has provided the industrial automation world with a full range of easy-to-use, integrated and scalable industrial-strength software with its FactorySuite® product line. The FactorySuite products have since evolved to become the FactorySuite A² product family with the addition of Invensys' ArchestrA technology. When used in conjunction with the Industrial Application Server, which was built on the ArchestrA industrial software architecture, InTrack software can maximize the engineering productivity of any manufacturing automation project.

In addition, Invensys' alliance with Microsoft will combine Invensys' strengths in process and manufacturing applications and expertise in key industry segments with Microsoft's platform, technology and enterprise products. The alliance will drive a new generation of Invensys and Wonderware® solutions to provide manufacturers with real-time visibility into their plant environments and supply chains.

## APPLICATIONS

InTrack applications serve a wide range of vertical markets including automotive and automotive-component manufacturing, medical devices, electronics, food and beverage, metals, fibers, and specialty materials. Some powerful InTrack applications that deliver significant value today include:

- An electronic manufacturer that produces tens of thousands of disk drives per day
- Automotive manufacturers doing unit-specific production of cars and trucks on several continents
- A medical manufacturer that ensures the safe and efficient manufacture of contact lenses
- An automobile parts supplier that coordinates and manages the production of parts in a plant with multiple manufacturing sites
- A metals manufacturer that tracks the genealogy of railway tracks for high-speed trains
- A company that manages the manufacturing of stamps, battery test strips and reflective traffic material

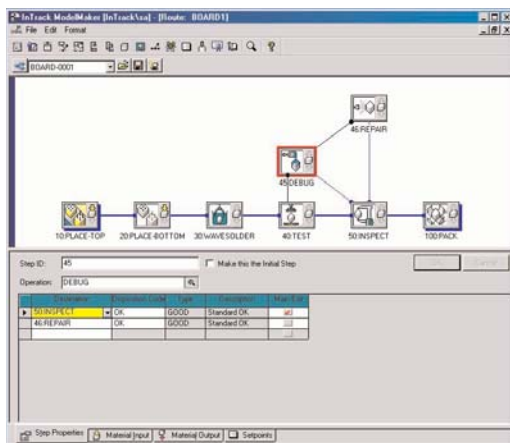
## FEATURES AND BENEFITS

InTrack 7.11 resource tracking software offers user-friendly tools for designing and interacting with a model-based manufacturing system. Whether the manufacturing process is simple or complex, it can be modeled with the InTrack ModelMaker graphical process modeler.

ModelMaker can link all facets of the manufacturing process - from raw materials and WIP tracking through machine usage and lot/part-specific data collection. Production models can be developed manually or created from an external system such as an ERP or Product Data Management (PDM) system.

### ModelMaker Makes it Easy to Define and Manage Production Models

ModelMaker provides a set of manufacturing objects that are defined through object selection, option selection and minimal text entry for items like name and description. By graphically linking manufacturing objects, a very sophisticated manufacturing model can be created without programming.



Graphical routing configuration in Model Maker

### Transaction Engine Leverages Microsoft COM Automation Server

The InTrack software's transaction engine is based on Microsoft's Common Object Model (COM) automation server, which facilitates application development and integration with external systems. With this server, driven by a powerful InTouch® scripting engine, users can create applications that support fully automatic or manual transactions. The end result: applications that can be adapted to a particular facility's manufacturing processes and which are capable of generating a complete production history of any individual lot, part, serial number or component throughout the entire chain of events.

### ActiveX Controls Make Application Development Easy

Version 7.11 includes a set of ActiveX controls specific to the InTrack software. These controls give users the power to quickly and easily develop and manage user interface applications. When used with Wonderware's InTouch human-machine interface (HMI) software, the controls can provide a flexible array of standard functionality.

### Open Database Design Simplifies Reporting

InTrack 7.11 software employs an open database design that simplifies reporting and data analysis. The data can reside on either Microsoft SQL Server 2000 or Oracle databases. This database schema is established automatically and contains both the model information and transactional data. While this model is optimized "out of the box," it is also extensible with ModelMaker's graphical configuration tools. InTrack software was the first Manufacturing Execution System (MES) product to support this architecture. It has been running in plants around the globe and has a proven track record with an install base of greater than 400 applications.

### All of this comes together in a package that results in:

- Reduced implementation time (many systems achieve online status in less than six months)
- Reduced total cost of ownership (development, deployment and maintenance)
- Increased understanding of factory-floor operations and dependencies
- Shop floor users more readily accept applications built on InTrack software as a result of the user-friendly interfaces
- Reduced capital expenses through reduced WIP and inventory levels
- Improved yield and product quality by conformance to specifications and continuous process improvements
- Higher levels of customer service and satisfaction through faster response to order-tracking enquiries
- Improved supply-chain interaction through better integration with internal and external systems
- More accurate schedules due to precise and timely plant-floor data
- Reduced costs to comply with regulatory agency and customers' information requirements

### System Connectivity Uses Standard Technology and Tools

The InTrack database can be driven by Microsoft SQL Server 2000 or Oracle databases. The software communicates to the database layer primarily through native database communication layers and Microsoft Active Data Objects (ADO).

InTrack 7.11 software uses Microsoft COM, which facilitates integration with other information systems through an Application Program Interface (API) supporting tighter integration with enterprise systems. This means that any COM-aware application development tools such as Microsoft's Visual Basic® development system can be used to develop InTrack applications.

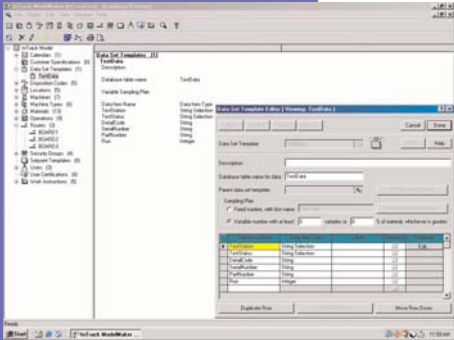
## InTrack Software Integrates with Other Wonderware FactorySuite A<sup>2</sup> Components

One of the key differentiators of InTrack 7.11 software is that it integrates with the full range of FactorySuite A<sup>2</sup> products, including the Industrial Application Server. In addition, this agile resource tracking software is designed to respond to real-time events. No other industrial MES software provider offers such

strong connections with information sources on the factory floor.

InTouch HMI software, with the help of Wonderware I/O Servers, facilitates direct communication between the InTrack manufacturing execution layer and plant-floor devices. These InTouch applications serve as efficient information brokers for plant-floor data.

Another powerful combination is Wonderware's InTrack software and the IndustrialSQL Server™ historian. For the IndustrialSQL Server historian adeptly captures and analyzes process information, while the InTrack software contextually correlates this information to plant operations and production data in an organized fashion. Wonderware's QI Analyst™ quality analysis software contributes an additional benefit by statistically analyzing process indicators and variables.



Factory floor device integration

## SPECIFICATIONS

### Client Hardware

Operating System*	CPU	RAM	Network Adapter
Microsoft Windows NT® 4.0	Pentium® 133 MHz	32 MB	<input checked="" type="checkbox"/>
Microsoft Windows® 2000	Pentium 133 MHz	64 MB	<input checked="" type="checkbox"/>
	Pentium II 200 MHz	128 MB	<input checked="" type="checkbox"/>
Microsoft Windows XP	300+ MHz	256 MB	<input checked="" type="checkbox"/>

### Server Hardware

Operating System*	CPU Speed	RAM	Network Adapter
Microsoft Windows NT 4.0	133 MHz	64 MB	<input checked="" type="checkbox"/>
Microsoft Windows 2000 Server	166 MHz	128 MB	<input checked="" type="checkbox"/>
	650 MHz	256 MB	<input checked="" type="checkbox"/>
Microsoft Windows Server™ 2003**	550 ~ 733 MHz	512 MB ~ 1G	<input checked="" type="checkbox"/>

### Client Software

Operating System*	Database*	Microsoft CAL per Client
Microsoft Windows XP Professional	SQL2000, Oracle 7.x, 8.x, 9.x	<input checked="" type="checkbox"/>
Microsoft Windows 2000	SQL2000, Oracle 7.x, 8.x, 9.x	<input checked="" type="checkbox"/>
Microsoft Windows NT 4.0 Workstation	SQL2000, Oracle 7.x, 8.x, 9.x	<input checked="" type="checkbox"/>

### Server Software

Operating System*	Database*	Microsoft CAL per Client
Microsoft Windows NT 4.0 Workstation / Microsoft Windows Server	SQL2000, Oracle 7.x, 8.x, 9.x***	<input checked="" type="checkbox"/>
Microsoft Windows Server 2000 / Microsoft Windows Advanced Server	SQL2000, Oracle 7.x, 8.x, 9.x***	<input checked="" type="checkbox"/>

\* See the Wonderware compatibility matrix for the most recent support information on platforms and databases.

\*\* For more detailed information, please review Microsoft Knowledge Base Article 319091.

\*\*\* Requires Net8 network driver

Contact Wonderware or your local Distributor for information about software products for industrial automation.  
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